

**ABSTRACT**

The present invention relates to a novel class of sulfonamides which are aspartyl protease inhibitors. In one 5 embodiment, this invention relates to a novel class of HIV aspartyl protease inhibitors characterized by specific structural and physicochemical features. This invention also relates to pharmaceutical compositions comprising these 10 compounds. The compounds and pharmaceutical compositions of this invention are particularly well suited for inhibiting HIV-1 and HIV-2 protease activity and consequently, may be advantageously used as anti-viral agents against the HIV-1 and HIV-2 viruses. This invention also relates to methods for inhibiting the activity of HIV aspartyl protease using 15 the compounds of this invention and methods for screening compounds for anti-HIV activity.